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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,410	05/21/2001	Huai-Rong Shao	MSI-754US	8900
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LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER LEE, PHILIP C	
			ART UNIT 2152	PAPER NUMBER
			NOTIFICATION DATE 06/26/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/862,410	Applicant(s) SHAO ET AL.	
	Examiner Philip C. Lee	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-13, 19-28, 30-32, 34 and 35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-13, 19-28, 30-32, 34 and 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/20/07</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2152

1. This action is responsive to the amendment and remarks filed on April 13, 2007.
2. Claims 6-13, 19-28, 30-32, 34 and 35 are presented for examination and claims 1-5, 14-18, 29 and 33 are canceled.
3. The text of those sections of Title 35, U.S. code not included in this office action can be found in a prior office action.

Objection

4. Claims 12-13 and 19-24 are objected to because according to MPEP 608.01, antecedent basis for the terms appearing in the claims, while an applicant is not limited to the nomenclature used in the application as filed, he or she should make appropriate amendment of the specification whenever this nomenclature is departed from by amendment of the claims so as to have clear support or antecedent basis in the specification for the new terms appearing in the claims. Applicant will be required to make appropriate amendment to the description to provide clear support or antecedent basis for the terms appearing in the claims provided no new matter is introduced. The terms “computer-readable storage media” and “storage media” are lacking clear support or antecedent basis in the description of the specification.

Claim Rejections - 35 USC 103

Art Unit: 2152

5. Claims 6-13, 19-28, 30-32 and 34-35 are further rejected under 35 U.S.C. 103(a) as being as being unpatentable over Gai et al. (US 6,651,101), herein after "'Gai' and Aharoni et al. (US 6,014,694), hereafter "'Aharoni" in view of Cheng (US 6,329,986), hereinafter "Cheng".

6. Gai and Aharoni were cited in the previous office action.

7. As to claim 6, Gai discloses the invention as claimed including a method comprising packetizing content information (col. 3. line 65 to col. 4. Line 3); generating resource coordination information based at Least in part on at least one prioritizing parameter associated with an application communicating the content information (col. 2, Line 56- col. 3, Line 32; and col. 4, Line 36-37) and on one or more prioritizing parameters associated with a particular object that is selected by a user interaction (col. 4, Lines 10-18, 37-38; col. 18, lines 2-21, 54-57) via a remote device that is operatively coupled to a network (212, fig. 2; col. 8, lines 15-17; col. 7, lines 53-56); selectively associating each packet of content information with a service class selected from among at Least two different service classes based on the resource coordination information (col. 5, Lines 25-30); selectively outputting at Least one packet of content information based on a priority associated with the service class associated with the packet of content information and providing the at Least one packet of content information to a network (col. 4, Lines 56-65).

8. Although Gai teaches one or more prioritizing parameters associated with a particular object that is selected by a user interaction, however, Gai does not explicitly teach including

Art Unit: 2152

video object. Aharoni teaches parameter associated with a particular video object (col. 19, lines 14-21).

9. It would have been obvious to one skilled in the art at the time of the invention to combine the teaching of Gai and Aharoni because Aharoni's teaching of video object would allow Gai's system to prioritize objects including video object in order to generate prioritize video stream to users.

10. Gai and Aharoni do not teach parameters reflect that the video object has higher priority. Cheng teaches one or more prioritizing parameters reflect that the particular video object has a relatively higher priority than other ones of the video objects (col. 10, lines 10-12; col. 30, lines 53-56) and is to be allocated a relatively higher portion of available bandwidth (increase bandwidth) so that the particular video object can be provided to the remote device with relatively better perceptual visual quality (enhancement of resolution)(col. 2, lines 21-34; col. 10, lines 20-27, 36-38); and the available bandwidth is allocated in accordance with the priority associated with the service class (enhanced allocation of system resources (e.g., increase bandwidth) in accordance with priority associated with level of quality) (col. 2, lines 21-34; col. 10, lines 8-9, 36-37).

11. It would have been obvious to one skilled in the art at the time of the invention to combine the teaching of Gai, Aharoni and Cheng because Cheng's teaching would enhance the

Art Unit: 2152

rendering mechanism in Gai's and Aharoni's systems by allowing higher priority object to be rendered with enhancement of resolution, and/or other qualities (col. 2, lines 20-25).

12. As to claim 12, Gai teaches the invention substantially as claimed comprising: generating prioritization information based at least in part on at least one parameter associated with an application media information and on one or more prioritizing parameters associated with a particular object that is selected from the media information by a user interaction (col. 4, Lines 10-18, 37-38; col. 18, lines 2-21, 54-57) via a remote device that is operatively coupled to a network (212, fig. 2; col. 8, lines 15-17; col. 7, lines 53-56); associating packets of the media information with a service class selected from a plurality of different service classes based on the prioritization information (col. 5, Lines 25-30); and selectively outputting from sending computing device onto the network some of the packets of media information based on their respective service classes(col. 4, Lines 56-65).

13. Although Gai teaches one or more prioritizing parameters associated with a particular object that is selected by a user interaction, however, Gai does not explicitly teach including video object. Aharoni teaches parameter associated with a particular video object that is selected from the media information (col. 19, lines 14-21). Aharoni further discloses selectively discarding a portion of the packets of the media information in accordance with an adaptive rate control mechanism at a sending computing device (col. 3, lines 46-60; and col. 12, lines 42-55).

Art Unit: 2152

14. It would have been obvious to one skilled in the art at the time of the invention to combine the teaching of Gai and Aharoni because Aharoni's teaching of video object would allow Gai's system to prioritize objects including video object in order to generate prioritize video stream to users.

15. Gai and Aharoni do not teach parameters reflect that the video object has higher priority. Cheng teaches one or more prioritizing parameters reflect that the particular video object has a relatively higher priority than other ones of the video objects (col. 10, lines 10-12; col. 30, lines 53-56) and is to be allocated a relatively higher portion of available bandwidth (increase bandwidth) so that the particular video object can be provided to the remote device with relatively better perceptual visual quality (enhancement of resolution)(col. 2, lines 21-34; col. 10, lines 20-27, 36-38); and the available bandwidth is allocated in accordance with the respective priorities associated with the respective service classes (enhanced allocation of system resources (e.g., increase bandwidth) in accordance with respective priorities associated with levels of quality) (col. 2, lines 21-34; col. 10, lines 8-9, 36-37).

16. It would have been obvious to one skilled in the art at the time of the invention to combine the teaching of Gai, Aharoni and Cheng because Cheng's teaching would enhance the rendering mechanism in Gai's and Aharoni's systems by allowing higher priority object to be rendered with enhancement of resolution, and/or other qualities (col. 2, lines 20-25).

Art Unit: 2152

17. As to claim 19, Gai discloses the apparatus substantially as claimed comprising packetizer logic configured to receive encoded content information and output corresponding packets of content information (col. 3, Line 65 to col. 4, Line 3); collaborator logic operatively coupled to the packetizer logic and configured to receive at Least one prioritizing parameter associated with at Least one application, including an application communicating the content information (col. 2, Line 56- col. 3, Line 32; and col. 4, Line 36-37) and one or more prioritizing parameters associated with a particular object that is selected by a user interaction (col. 4, Lines 10-18, 37-38; col. 18, lines 2-21, 54-57) via a remote device that is operatively coupled to a network (212, fig. 2; col. 8, lines 15-17; col. 7, lines 53-56) and output resource coordination information based at Least in part on the at Least one prioritizing parameter associated with the application (col. 10, Lines 8-10); priority mapping logic operatively coupled to the collaborator logic and configured to receive the packetized content information and the resource coordination information, and selectively associate each received packet of content information with a service class selected from among at Least two different service classes based on the resource coordination information, and selectively output at Least one packet of content information based on a priority associated with each service class (col. 5, Lines 25-30); and forwarder logic operatively coupled to the priority mapping logic and configurable to provide the at Least one packet of content information to a network (col. 4, Lines 56-65).

18. Although Gai teaches one or more prioritizing parameters associated with a particular object that is selected by a user interaction, however, Gai does not explicitly teach including

Art Unit: 2152

video object. Aharoni teaches parameter associated with a particular video object (col. 19, lines 14-21).

19. It would have been obvious to one skilled in the art at the time of the invention to combine the teaching of Gai and Aharoni because Aharoni's teaching of video object would allow Gai's system to prioritize objects including video object in order to generate prioritize video stream to users.

20. Gai and Aharoni do not teach parameters reflect that the video object has higher priority. Cheng teaches one or more prioritizing parameters reflect that the particular video object has a relatively higher priority than other ones of the video objects (col. 10, lines 10-12; col. 30, lines 53-56) and is to be allocated a relatively higher portion of available bandwidth (increase bandwidth) so that the particular video object can be provided to the remote device with relatively better perceptual visual quality (enhancement of resolution)(col. 2, lines 21-34; col. 10, lines 20-27, 36-38); and the available bandwidth is allocated in accordance with the priority associated with the service class (enhanced allocation of system resources (e.g., increase bandwidth) in accordance with priority associated with level of quality) (col. 2, lines 21-34; col. 10, lines 8-9, 36-37).

21. It would have been obvious to one skilled in the art at the time of the invention to combine the teaching of Gai, Aharoni and Cheng because Cheng's teaching would enhance the

Art Unit: 2152

rendering mechanism in Gai's and Aharoni's systems by allowing higher priority object to be rendered with enhancement of resolution, and/or other qualities (col. 2, lines 20-25).

22. As to claim 25, Gai discloses the invention substantially as claimed including above a system comprising a network environment including a backbone network , and a first access network and a second access network , each being operatively coupled to the backbone network (col. 1, Line 29 to col. 2, Line 35; and Fig. 2); a plurality of host devices including a first host device operatively coupled to the first access network and a second host device operatively coupled to the second access network (e.g. 222, Fig. 2), the second host device receiving a user interaction comprising selection of a particular object (col. 8, lines 15-17; col. 7, lines 53-56; col. 18, lines 2-21, 54-57); application-aware resource controllers (208, 210, Fig. 2) configured to selectively aggregate content information associated with at least one communication session established between two hosts (col. 6, Lines 42-57), and to map the aggregated information to at Least two service classes based at least in part on one or more prioritizing parameters associated with the user interaction(216, Fig. 2; and col. 8, lines 15-17; col. 7, lines 53-56); wherein at least the first application-aware resource controller is configured to operatively associate a respective priority with each respective service class of the two or more different service classes (col. 2, lines 59-63; col. 5, lines 25-30; col. 18, lines 54-56).

23. Although Gai teaches selection of a particular object by a user interaction, however, Gai does not explicitly teach object includes video object. Aharoni teaches user selection of a particular video object (col. 19, lines 14-21).

24. It would have been obvious to one skilled in the art at the time of the invention to combine the teaching of Gai and Aharoni because Aharoni's teaching of video object would allow Gai's system to prioritize objects including video object in order to generate prioritize video stream to users.

25. Gai and Aharoni do not teach parameters reflect that the video object has higher priority. Cheng teaches wherein the one or more prioritizing parameters reflect that the particular video object has a relatively higher priority than other video objects (col. 10, lines 10-12; col. 30, lines 53-56) and is to be allocated a relatively higher portion of available bandwidth (increase bandwidth) within the network environment so that the particular video object can be provided to the second host device with relatively better perceptual visual quality (enhancement of resolution)(col. 2, lines 21-34; col. 10, lines 20-27, 36-38); and the available bandwidth can be allocated in accordance with the respective priority associated with each respective service class (enhanced allocation of system resources (e.g., increase bandwidth) in accordance with priority associated with level of quality) (col. 2, lines 21-34; col. 10, lines 8-9, 36-37).

26. It would have been obvious to one skilled in the art at the time of the invention to combine the teaching of Gai, Aharoni and Cheng because Cheng's teaching would enhance the rendering mechanism in Gai's and Aharoni's systems by allowing higher priority object to be rendered with enhancement of resolution, and/or other qualities (col. 2, lines 20-25).

Art Unit: 2152

27. As per claims 7, 20, and 34-35, Gai, Aharoni and Cheng teach the invention substantially as claimed in claims 6, 12, 19 and 25 above. Aharoni further disclose calculating optimum compression level of a particular video object selected from user interaction by return acknowledgments and statistics (col. 19, lines 14-21). It would have been obvious to one skilled in the art at the time of the invention to include mouse clicking, mouse moving, object zoom-in, object zoom-out, or any user interaction that affect the rate of receiving returned acknowledgments and statistics in order to calculate the optimum compression level. User interaction such as fast-forwarding on a streaming video, or mouse clicking to start another streaming video session will consume part of the available bandwidth in a connection. This will cause the rate of the returning packets (acknowledgment or statistics) to change.

28. As to claim 8, Gai, Aharoni and Cheng teach the invention substantially as claimed in claim 6 above. Aharoni further teach generating the resource coordination information based at least in part on at least one prioritizing parameter associated with a monitored performance of the network (col. 8, lines 2-23).

29. As to claims 9, 10, 22, and 23, Gai, Aharoni and Cheng teach the invention substantially as claimed in claims 6 and 19 above. Aharoni further disclose encoding initial content information as the encoded content information, and segmenting raw video data into a plurality of video objects and wherein at least one of the video objects is included in the initial content information (col. 2, lines 56-59; and col. 7, lines 49-51).

Art Unit: 2152

30. As to claims 11, 13, 24, and 31, Gai, Aharoni and Cheng teach the invention substantially as claimed in claims 9, 12, 22 and 25 above. Aharoni further disclose the content information includes data representing media information selected from a group comprising video information, audio information, image information, and textual information (col. 1, lines 12-17., and col. 2, lines 15-16).

31. As to claim 21, Gai, Aharoni and Cheng teach the invention substantially as claimed in claim 19 above. Aharoni further disclose network monitoring logic operatively coupled to the collaborator logic and configurable for use with the network and in monitoring network performance, and to output at least one prioritizing parameter associated with the network performance (col. 2, lines 56-63; and col. 13, lines 11-13), and the collaborator logic is further configured to receive the at least one prioritizing parameter associated with the network performance, and output the resource coordination information based at least in part on the at least one prioritizing parameter associated with the network performance (col. 8, lines 2-23; and Fig. 2).

32. As to claim 26, Gai, Aharoni and Cheng teach the invention substantially as claimed in claim 25 above. Aharoni further disclose at least the first application-aware resource controller is configured to selectively adapt a flow rate associated with the content information based on an identified state of at least one of the first access network, the second access network, or the backbone network (222, Fig. 15).

Art Unit: 2152

33. As to claim 27, Gai, Aharoni and Cheng teach the invention substantially as claimed in claim 25 above. Aharoni further disclose at least the first application-aware resource controller is configured to selectively adapt a flow rate to associated with the content information based on at least one identified requirement of the second host device (col. 7, lines 7-15; and col. 8, lines 8-17).

34. As to claim 28, Gai, Aharoni and Cheng teach the invention substantially as claimed in claim 25 above. Aharoni further disclose at least the first application-aware resource controller is configured to controllably handle the content information per application-based signaling, and to operatively associate a priority with the at least one service class (col. 8, lines 8-23; and col. 9, lines 57-62).

35. As to claims 30 and 32, Gai, Aharoni and Cheng teach the invention substantially as claimed in claim 25 above. Aharoni further teach at least one processing agent operatively configured within the backbone network and configured to selectively filter the aggregated information associated with different communication sessions based on identified bandwidth constraints and service classes, and implement packet-level fast transcoding and related signaling (col. 10, Lines 33-48; and col. 11, lines 53-56).

36. Applicant's arguments filed 04/13/2007 have been fully considered but they are moot in view of new ground(s) of rejection.

Art Unit: 2152

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Downs et al, US 5,894,321.

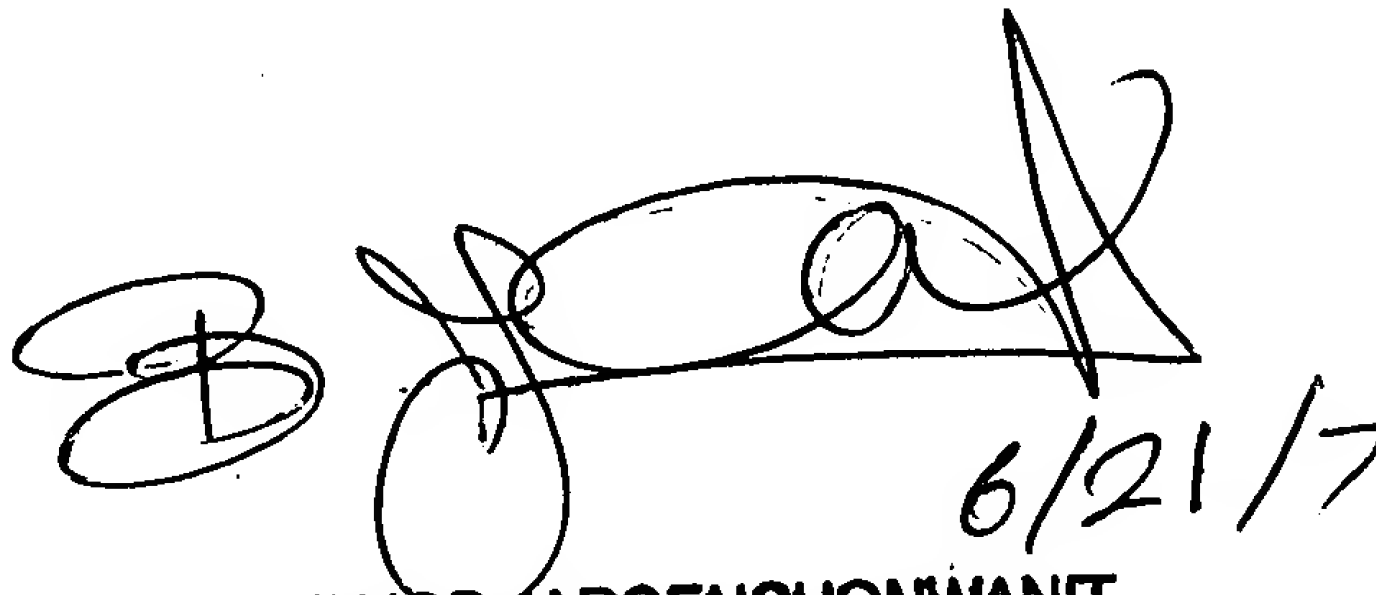
38. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or

Art Unit: 2152

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P.L.



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6/21/17